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Application No. 10/629,863
Amendment dated January 17, 2007
Reply to Office Action of October 17, 2006

Docket No.: 0941-0800P

AMENDMENTS TO THE CLAIMS

1-5. (Cancelled)

6. (Original) A plug detection circuit, disposed in a electronics device with an earphone jack, wherein the earphone jack has at least a first pin, a second pin and a third pin, the detection circuit comprising:

a first resistor electrically coupled to a voltage source and the first pin respectively;

a second resistor electrically coupled to the first pin;

a first capacitor having one end electrically coupled to a first output terminal with the second resistor, and the other end coupled to ground, wherein the potential at the first output terminal is a first logic potential;

a third resistor having one end electrically coupled to the third pin;

a fourth resistor electrically coupled to the voltage source and the second pin respectively;

a fifth resistor having one end electrically coupled to the second pin;

a second capacitor having one end electrically coupled to the fifth resistor, and the other end coupled to ground;

a sixth resistor having one end electrically coupled to the voltage source; and

a switch having one end electrically coupled to the sixth resistor, and the other end coupled to ground, wherein the switch further has a control terminal electrically coupled to a second output terminal with the second capacitor and the fifth resistor, and the potential at the second output terminal is a second logic potential.

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7. (Original) The plug detection circuit as claimed in claim 6, wherein the first pin is electrically coupled to the third pin and the switch is turned on when no plug is connected to the earphone jack, and the first logic potential and the second logic potential are low.

8. (Original) The plug detection circuit as claimed in claim 6, wherein the plug connected is of a typical earphone with a first conductive ring and a grounding ring; the second pin, the first conductive ring and the ground ring are electrically coupled to ground together, the first pin is not electrically coupled to the third pin, and the switch is turned off when the plug is connected to the earphone jack; and the first logic potential and the second potential are both high.

9. (Original) The plug detection circuit as claimed in claim 6, wherein the plug connected to the earphone jack is of an earphone with microphone function and has a first conductive ring, a second conductive ring and a grounding ring; the first conductive ring is electrically coupled to the grounding ring, the second conductive ring is electrically coupled to the second pin, the first pin is not electrically coupled to the third pin, and the switch is turned on when the plug is connected to the earphone jack; and the first logic potential is high and the second potential is low.